

April 9, 1973

Mrs Mary Jane Andrews
5258-C Tamarack Circle, E.
Columbus, Ohio 43229

Dear Mrs. Andrews:

Please relax right now about the x-rays you had taken when your pregnancy was six months along. Your doctor was right to have it done if he suspected twins.

The time a fetus should be most sensitive to x-rays is within two months after conception, judging from animal experiments. There still is no good evidence in human babies that any damage occurs.

As for leukemia, the increased incidence is related only to very big doses such as the atom bombing in Hiroshima, or massive doses to treat certain conditions of the spine, not just from diagnostic x-rays, even six. The childhood cancer related to x-ray should be a thing of the past. When I was in medical school, it was common to give a dose of x-ray to the chest of a baby when it was having difficulty breathing. A few of these babies developed thyroid cancer later. Naturally, this practice was stopped immediately when the association was found.

The safety of x-rays has increased steadily over the years with better mechanical design, and the numbers of people's lives saved by the use of x-rays are phenomenal. If x-ray were a serious hazard to the fetus, or the parents' germ cells, there would be much more cancer than there is and many more defective babies. It is of course intelligent, if pregnant, to so inform your doctor or dentist if x-rays are suggested.

Your chances of having another normal baby are excellent, from the information in your letter. Please start functioning "supernormally" to make up for lost time! Thank you for writing me.

Sincerely yours,

VA:bm
bcc:VL

Virginia Apgar, M.D., M.P.H.